



Dear Resident,

This report contains our monitoring results from January 1 to December 31, 2017.

Our drinking water is a vital resource that impacts our quality of life. We invite you to give attention to the information contained in this report to learn about Richfield's water and the steps we take to provide you and the entire community with a reliable and trustworthy water supply.

We work with the Minnesota Department of Health (MDH) to test drinking water for more than 100 contaminants. It is not unusual to detect contaminants in small amounts. No water supply is ever completely free of contaminants. Drinking water standards protect Minnesotans from substances that may be harmful to their health. Learn more by visiting the MDH webpage "Basics of Monitoring and Testing Drinking Water in Minnesota"

[www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html](http://www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html)

After reading this report, contact Russ Lupkes, Utilities Superintendent, at 612-861-9175 or [rlupkes@richfieldmn.gov](mailto:rlupkes@richfieldmn.gov) if you have questions about Richfield's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

We are pleased to share the news that 2017 monitoring again detected no contaminants at levels that violated federal drinking water standards.



Aesthetic water properties are not expected to have an impact on public health, however they may impact consumers' choices regarding use of water softeners, plumbing fixtures, home brewing, cleaning products, etc.

**Aesthetic Water Properties**  
**Hardness: 5-6 grains**  
**pH: 8.5**

# Drinking Water Report 2017

**This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.**

**Spanish:** Información importante. Si no la entiende, haga que alguien se la traduzca ahora.

**Hmong:** Daim ntawv teev num no muaj cov ntaub ntawv tseem ceeb hais txog koj cov dej haus. Nrhiv ib tug neeg pab txhais cov ntaub ntawv no rau koj, lossis tham nrog ib tug neeg uas paub cov lus no.

**Somali:** Warbixintan waxay wadataa macluumaad muhiim ah ee la xiriira biyaha aad cabtid. Cid ha kuu tarjunto ama la hadl cid fahmaysa.

**Tibetan:** འདི་འབྲོར་མོ་ནང་གི་ཉ་ཏུ་གལ་ཆེ་བ་གནས་ཚུལ་ཡོད།  
སྐད་སྒྱུར་གནང་མོག་ལ་ཡང་ན་གནས་ཚུལ་གིས་མཁན་ཞིག་ལ་བཀའ་འདི་ཞུ་རྒྱུ་རོགས་གནང་།

## Making Safe Drinking Water

Richfield works hard to provide you with safe and reliable drinking water that meets federal and state water quality requirements. The purpose of this report is to provide you with information on your drinking water and how to protect our precious water resources.

The U.S. Environmental Protection Agency (EPA) sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water. This ensures that tap water is safe to drink for most people. The U.S. Food and Drug Administration regulates the amount of certain contaminants in bottled water. Bottled water must provide the same public health protection as public tap water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

## Drinking Water Sources.

Minnesota's primary drinking water sources are groundwater and surface water. Groundwater is the water found in aquifers beneath the surface of the land and supplies 75 percent of Minnesota's drinking water. Surface water is the water in lakes, rivers, and streams above the surface of the land. Surface water supplies 25 percent of Minnesota's drinking water.

Your drinking water comes from a groundwater source: seven wells ranging from 405 to 1066 feet deep, that draw water from the Prairie Du Chien-Jordan, Jordan and Wonewoc-Mt. Simon aquifers

Contaminants can get in drinking water sources from the natural environment and from people's daily activities.

**There are five main types of contaminants in drinking water sources:**

- **Microbial contaminants**, such as viruses, bacteria, and parasites. Sources include sewage treatment plants, septic systems, agricultural livestock operations, pets, and wildlife.
- **Inorganic contaminants** include salts and metals from natural sources (e.g. rock and soil), oil and gas production, mining and farming operations, urban stormwater runoff, and wastewater discharges.
- **Pesticides and herbicides** are chemicals used to reduce or kill unwanted plants and pests. Sources include agriculture, urban stormwater runoff, and commercial and residential properties.
- **Organic chemical contaminants** include synthetic and volatile organic compounds. Sources include industrial processes and petroleum production, gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants** such as radium, thorium, and uranium isotopes come from natural sources (e.g. radon gas from soils and rock), mining operations, and oil and gas production.



The MDH provides information about your drinking water source(s) in a source water assessment, including:

- How Richfield is protecting your drinking water source(s);
- Nearby threats to your drinking water sources;
- How easily water and pollution can move from the surface of the land into drinking water sources, based on natural geology and the way wells are constructed.

Find your source water assessment at [www.health.state.mn.us/divs/eh/water/swp/swa/](http://www.health.state.mn.us/divs/eh/water/swp/swa/) or call 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

## Lead

You may be in contact with lead through paint, water, dust, soil, food, hobbies, or your job. Coming in contact with lead can cause serious health problems for everyone. There is no safe level of lead. Babies, children under six years, and pregnant women are at the highest risk.

Lead is rarely in a drinking water source, but it can get in your drinking water as it passes through lead service lines and your household plumbing system. Richfield provides high quality drinking water, but it cannot control the plumbing materials used in private buildings.

### There are no lead service lines in the Richfield Public Water System.

Read below to learn how you can protect yourself from lead in drinking water.

1. **Let the water run** for 30-60 seconds before using it for drinking or cooking if the water has not been turned on in over six hours.

The only way to know if lead has been reduced by letting it run is to check with a test. If letting the water run does not reduce lead, consider other options to reduce your exposure.

*(Continues on back page...)*

## Fluoride

Fluoride is nature's cavity fighter, with small amounts present naturally in many drinking water sources. There is an overwhelming weight of credible, peer-reviewed, scientific evidence that fluoridation reduces tooth decay and cavities in children and adults, even when there is availability of fluoride from other sources, such as fluoride toothpaste and mouth rinses. Since studies show that optimal fluoride levels in drinking water benefit public health, municipal community water systems adjust the level of fluoride in the water to a concentration between 0.5 to 1.5 parts per million (ppm), with an optimal fluoridation goal between 0.7 and 1.2 ppm to protect your teeth. Fluoride levels below 2.0 ppm are not expected to increase the risk of a cosmetic condition known as enamel fluorosis.





## How to Read the Water Quality Data Tables

The tables below show the contaminants we found last year or the most recent time we sampled for that contaminant. They also show the levels of those contaminants and the Environmental Protection Agency's limits. Substances that we tested for but did not find are not included in the tables.

We sample for some contaminants less than once a year because their levels in water are not expected to change from year to year. If we found any of these contaminants the last time we sampled for them, we included them in the tables below with the detection date.

We may have done additional monitoring for contaminants that are not included in the Safe Drinking Water Act. To request a copy of these results, call the Minnesota Department of Health at 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

*Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. The developing fetus and therefore pregnant women may also be more vulnerable to contaminants in drinking water. These people or their caregivers should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.*

### Key to the Table

**Level Detected** - This is the value used to determine compliance with federal standards. In some cases, it is the highest value detected and in other cases it is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

**ppm** - Parts per million or milligrams per liter. One ppm is like one drop in one million drops of water, or about one cup in a swimming pool.

**ppb** - Parts per billion or micrograms per liter. One ppb is like one drop in one billion drops of water, or about one drop in a swimming pool.

**MCL** - Maximum Contaminant Level. This is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG** - Maximum Contaminant Level Goal. The level of a contaminant in drinking water below where there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MRDL** - Maximum Residual Disinfectant Level.

**MRDLG** - Maximum Residual Disinfectant Level Goal.

**AL** - Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

**90% Level** - This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.

Substance (monitored at plant) (units) test date	MCL	MCLG	Level Detected	Range	Major Source of Contaminant	Meets Standard
Chlorine (ppm)	4 (MRDL)	4 (MRDLG)	1.03*	0.71-1.08**	Water additive used to control microbes.	✓
Fluoride (ppm)	4	4	0.59	0.52-0.67	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.	✓
Substance (monitored at tap) (units) test date	AL	MCLG	90% Level	Sites Over AL	Major Source of Contaminant	Meets Standard
Copper (ppm) 6/22/2016	1.3	0	0.11	0 of 30 sites	Corrosion of household plumbing systems; Erosion of natural deposits.	✓
Lead (ppb) 6/22/2016	15	0	2.6	0 of 30 sites	Corrosion of household plumbing systems; Erosion of natural deposits.	✓

\*Highest quarterly average. \*\*Highest and lowest monthly average.

## Lead (...continued)

2. **Use cold water** for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water.
3. **Test your water.** In most cases, letting the water run and using cold water for drinking and cooking should keep lead levels low in your drinking water. If you are still concerned about lead, arrange with a laboratory to test your tap water. Testing your water is important if young children or pregnant women drink your tap water.

Contact a Minnesota Department of Health accredited laboratory to get a sample container and instructions on how to submit a sample:

Environmental Laboratory Accreditation Program

[www.health.state.mn.us/accreditation](http://www.health.state.mn.us/accreditation)

MDH can help you understand your test results.

4. **Treat your water** if a test shows your water has high levels of lead after you let the water run.

Learn more about water treatment units on this page:

[www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html](http://www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html)

Learn more about lead in water visit these pages:

[www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

[www.health.state.mn.us/divs/eh/water/contaminants/lead.html](http://www.health.state.mn.us/divs/eh/water/contaminants/lead.html)

Call the EPA Safe Drinking Water Hotline at (800) 426-4791.

To learn how to reduce your contact with lead from sources *other than your drinking water*, visit:

[www.health.state.mn.us/divs/eh/lead/sources.html](http://www.health.state.mn.us/divs/eh/lead/sources.html)

## Backflow Prevention Devices

In an effort to protect public health and the public water supply, the City has established a cross connection and backflow prevention program. The purpose of the program is to isolate potential hazardous sources from coming in contact with the water supply.



A member of Minnesota State

## A Career in the Water Industry is waiting for YOU!

St. Cloud Technical & Community College's Water Environment Technologies (WETT) program provides you with the skills you need to land a great job in this rapidly growing industry. There are many benefits to this program:

- Hands-on learning
- 12 month program
- Metro and St. Cloud locations
- 100% placement rate (2016)

Call St. Cloud Technical & Community College at 1-320-308-5952 for more information on this career program or e-mail Bill Spain,

Instructor: [bspain@sctcc.edu](mailto:bspain@sctcc.edu)

Or Gregg Kropp, Instructor: [Gregg.Kropp@sctcc.edu](mailto:Gregg.Kropp@sctcc.edu)

### RPZ

This is accomplished with backflow prevention devices such as reduced pressure zone devices (RPZ).

As of January 23, 2016 the Minnesota State Plumbing Code requires all testable devices to be inspected and tested every 12 months. Testable devices include the following:

1. Reduced Pressure Zone device (RPZ)
2. Pressure Vacuum Breaker device (PVB)
3. Double Check Valves (DCV)
4. Spill Resistant Pressure Vacuum Breaker (SVB)

If you have an older backflow prevention device (PVB, AVB or DCVA), it is never a bad idea to get it inspected. The device prevents contaminated water from entering the plumbing system in your home. These contaminants can come from your irrigation system, boiler system, or any other process where water contacts a non-potable source.

The two most common places to find testable devices in Minnesota homes is on the lawn irrigation system and on the water supply piping to a steam or hot water boiler.

More information can be found at:

[www.richfieldmn.gov/departments/public-works/utilities/backflow-prevention](http://www.richfieldmn.gov/departments/public-works/utilities/backflow-prevention)

## Stormwater Runoff

Grass clippings and leaves blown or swept into storm drains or into the street harms the lakes and rivers in and around Richfield. When leaf and grass clippings enter the storm drain, flooding can occur. Only rain must enter the storm drain. When anything but rain goes down the storm drain, it can become a drainage problem.

Grass clippings left on the ground improve the health of the lawn itself. There is no excuse for sweeping grass and/or leaves into the storm drains or waterways. Stormwater runoff from lawn maintenance is a contributor of water pollution and can harm water bodies by:

- Increasing the levels of sediment and suspended solids, which lower oxygen levels in water bodies.
- Increasing nutrients (nitrogen & phosphorus that are found in washing detergents) that also lower oxygen levels and reduces water quality.
- Over-applying yard chemicals (fertilizers, pesticides and herbicides) results in them washing away into nearby waterways.

## Wipes Clog Pipes!

The City of Richfield maintains 120 miles of sanitary sewer pipe and 9 lifts stations. All of this wastewater flows to the Met Councils treatment plant in St. Paul. But sometimes, it doesn't flow. The City's pumps and pipes become clogged with materials such as rags, baby wipes, feminine hygiene products and fats, oils and grease. Sewer systems and treatment plants were not designed to handle these materials. It costs residents and taxpayers more money in additional maintenance.

Toilet paper will safely dissolve in the sewer system, but everything else should go in the garbage!



PVB

